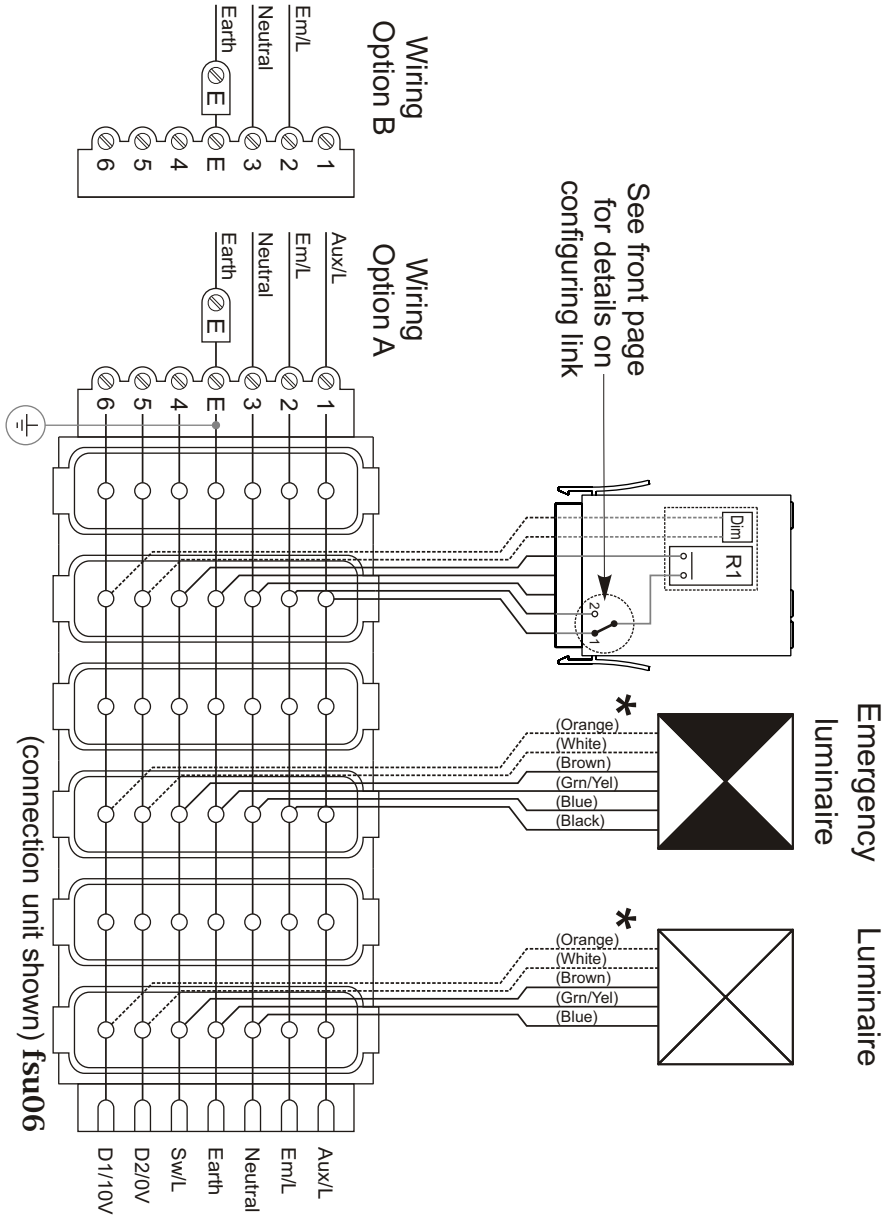


Circuit diagram for **fnc4000(D,X or A)** Controllers


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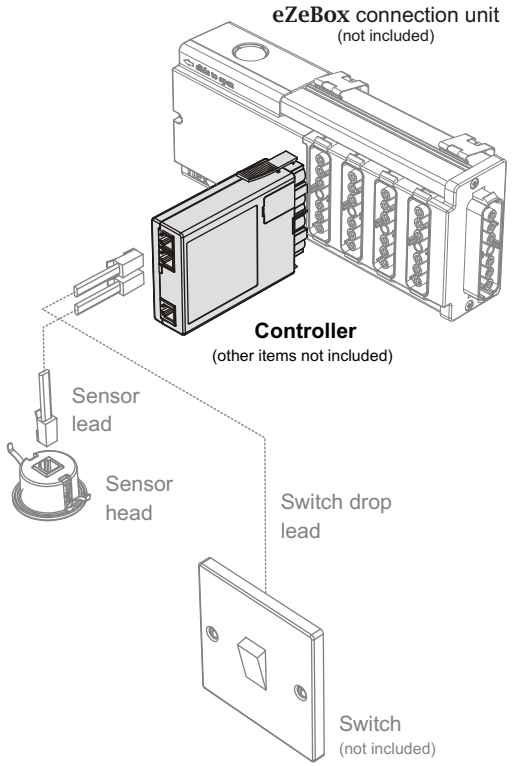
# fnc4000(D,X or A) - Controllers



The **fnc4000(D,X or A)** are all control devices which can plug directly into any of the **eZeBox** range of connection units or a 7-pole single socket outlet. Working with at least a plug-in sensor head or together with a switch, the device will control the connected mains rated luminaires ON, OFF and DIM up or down. The exact operation will largely depend on which of the input devices are connected. Note that any connected switch or sensor head will be operating at ELV.

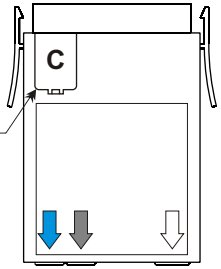
Three products are available:
**fnc4000D :** DSI digital dimmable ballasts.
**fnc4000X :** DALI digital dimmable ballasts.
**fnc4000A :** Analogue ballasts 0-10V.

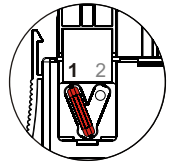
Please ensure the correct product is selected for the type of ballast being used as incorrect connection may damage the controller.



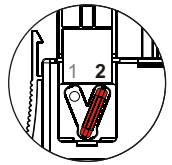

## Configuring the fnc4000(D,X or A) controller

Prise open lid '**C**' using a screw driver. Position link as required.




**Link in position 1**
Lights can remain ON during an emergency test. Wire connection unit as shown on the back page.




**Link in position 2**
Lights will switch OFF during an emergency test. Wire connection unit as shown on the back page.

**Rating**
Supply Voltage : 230V~ 50Hz
**Load**

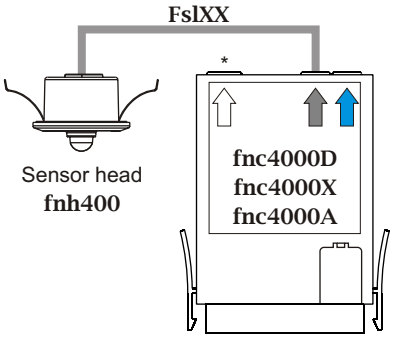
| | |
|---|---|
| Fluorescent & Incandescent Lighting | : 6A |
| Compact Fluorescent Lighting | : 3A |

**Maximum number of Ballast**

| | | |
|---|---|---|
| **fnc4000D** | (DSI Digital control) | : 25 |
| **fnc4000X** | (DALI Digital control) | : 25 |
| **Fnc4000A** | (Analogue 0-10V control) | : 25 |

## Using a **fnc4000(D,X or A)** controller with a sensor head only

* Refer to leaflet *Networking Sensors,* leaflet number 17/245.



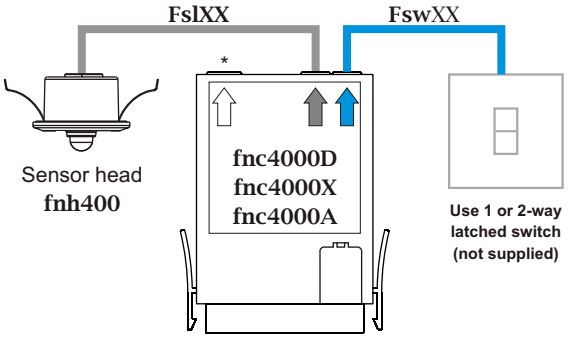

### Operation

**Occupancy detection:** Lights will switch ON whenever there is occupancy detected by the sensor head. When occupancy is no longer detected, lights will switch OFF after a pre-selected *time-out* period (default 20 minutes).
**Daylight linking:** While lights are ON due to occupancy their light output will adjust to compensate for any changes in ambient light in order to maintain a constant light level under the sensor head - the *target level*.

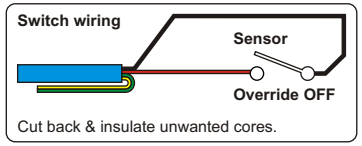
Note: Alternative operational options not necessarily shown above are available using the **frc/set** setup remote control.
Full instructions for setting up the sensor are supplied with the sensor head and the **frc/set** remote control - both ordered separately.

## Using **fnc4000(D,X or A)** controller with a sensor head & an override switch

* Refer to leaflet *Networking Sensors,* leaflet number 17/245.




**Note:** For safe operation it is advisable to extend occupancy coverage to cover the wall switch. In this way, operating the switch to 'SENSOR' position ensures the lights turn ON.




**See table below for other switching options**

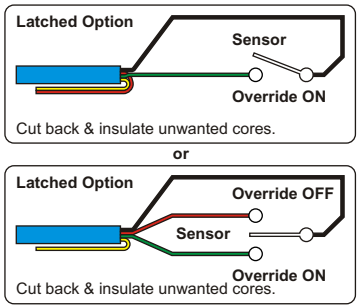
### Operation:

**Switch control:**
Override OFF - turns the lights OFF (takes priority over sensing).
**Occupancy detection:** Provided the wall switch is in the 'Sensor' position the lights will switch ON whenever there is occupancy detected by the sensor head. When occupancy is no longer detected, lights will switch OFF after a pre-selected *time-out* period (default 20 minutes).
**Daylight linking:** While lights are ON due to occupancy their light output will adjust to compensate for any changes in ambient light in order to maintain a constant light level under the sensor head - the *target level.*

**Note:**
If your room requires 2-way switching, a special 'Y' connector is available to enable two switch drop leads to be connected. (Part No. **fsy/2e/2** - OFF control from 2 x 2-way switches)

### Other switching options incorporating override ON

**Note:**
You may not be able to claim enhanced capital allowances under the Carbon Trust scheme if you incorporate local 'override ON' switches in your occupancy sensor scheme.




Note: Alternative operational options not necessarily shown above are available using the **frc/set** setup remote control.
Full instructions for setting up the sensor are supplied with the sensor head and the **frc/set** remote control - both ordered separately.